

## **Regional HIV/AIDS Epidemiologic Profile of Plymouth County, Massachusetts: 2015**

### **Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data**

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Disease, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2015, this resulted in the removal of 4,401 HIV/AIDS cases, of which 1,021 have died and 3,380 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location at diagnosis, is the basis for MDPH service planning. Please note that previous HIV/AIDS fact sheets, data reports and presentations included cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual risk category for men; those cases have been reassigned to the no identified risk (NIR) category. The presumed heterosexual risk category was used with the intention of identifying HIV risk for women when sex with men is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. The application of the presumed heterosexual risk category to men is overly inclusive in that woman to man HIV transmission is biologically less probable, and there are alternate risks that are possible for men, including sex with other men (MSM) or IDU. The CDC reports men diagnosed with HIV/AIDS who report sex with women as their only risk factor, without corresponding partner risk or HIV status information, in the NIR category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for men in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual risk categories for women.

**Table 1. Total number of people reported with HIV infection or AIDS<sup>1</sup> by mortality status on December 31, 2014: Plymouth County, Massachusetts<sup>2</sup>**

	<b>N</b>	<b>%</b>
People Living with HIV/AIDS	814	59%
People Reported with HIV or AIDS who are Deceased	559	41%
Total Number of People Reported with HIV Infection or AIDS	<b>1,373</b>	<b>100%</b>

<sup>1</sup> Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

<sup>2</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

**Table 2. Average annual rate of HIV infection diagnosis from 2011 to 2013 and HIV/AIDS prevalence rate on 12/31/14<sup>1</sup>: Plymouth County, Massachusetts<sup>2</sup>**

<b>Average annual HIV diagnosis rate from 2011–2013</b>	<b>Average rate per 100,000</b>	<b>Average annual number of HIV diagnoses</b>
Plymouth County, MA	8.5	42.0
Massachusetts Total	10.7	701.3
<b>HIV/AIDS prevalence rate on 12/31/14</b>	<b>Rate per 100,000</b>	<b>Number of people living with HIV/AIDS</b>
Plymouth County, MA	164.5	814
Massachusetts Total	301.5	19,737

<sup>1</sup> The denominators for rate calculations are from the MDPH Massachusetts Race Allocated Census 2010 Estimates (MRACE 2010), Massachusetts Department of Public Health, Bureau of Health Information, Statistics, Research, and Evaluation.

<sup>2</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

**Table 3. People living with HIV/AIDS<sup>1</sup>, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year<sup>2</sup>: 2004–2013, Plymouth County, Massachusetts<sup>3</sup>**

<b>Year</b>	<b>HIV/AIDS Prevalence</b>	<b>Deaths among those with HIV/AIDS</b>	<b>Diagnosis of HIV Infection</b>
2004	576	17	34
2005	596	18	38
2006	617	14	35
2007	640	12	35
2008	661	14	35
2009	686	11	36
2010	704	9	27
2011	734	12	42
2012	768	8	42
2013	796	14	42

<sup>1</sup> Number of people living with HIV/AIDS on 12/31 of each year

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

<sup>3</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

**Table 4. People diagnosed with HIV infection from 2011–2013<sup>1</sup> and people living with HIV/AIDS on December 31, 2014 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Plymouth County, Massachusetts<sup>2</sup>**

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	79	63%	525	64%
Female	47	37%	289	36%
Place of Birth:	N	%	N	%
US	-- <sup>7</sup>	-- <sup>7</sup>	503	62%
Puerto Rico/US Dependency <sup>3</sup>	-- <sup>7</sup>	-- <sup>7</sup>	38	5%
Non-US	63	50%	273	34%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	40	32%	358	44%
Black (non-Hispanic)	71	56%	328	40%
Hispanic/Latino	-- <sup>7</sup>	-- <sup>7</sup>	111	14%
Asian/Pacific Islander	-- <sup>7</sup>	-- <sup>7</sup>	10	1%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	36	29%	233	29%
Injection Drug Use (IDU)	-- <sup>7</sup>	-- <sup>7</sup>	117	14%
MSM/IDU	0	0%	17	2%
Heterosexual Sex	11	9%	135	17%
Other	-- <sup>7</sup>	-- <sup>7</sup>	27	3%
Total Undetermined	75	60%	285	35%
• Presumed Heterosexual Sex <sup>4</sup>	33	26%	117	14%
• Undetermined <sup>5</sup>	42	33%	168	21%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2014	
Under 13	0	0%	1	<1%
13 to 19	6	5%	5	1%
20 to 24	10	8%	15	2%
25 to 29	8	6%	28	3%
30 to 34	12	10%	34	4%
35 to 39	9	7%	60	7%
40 to 44	12	10%	61	7%
45 to 49	25	20%	118	14%
50 to 54	18	14%	168	21%
55 to 59	16	13%	147	18%
60+	10	8%	177	22%
<b>Total<sup>6</sup></b>	<b>126</b>	<b>100%</b>	<b>814</b>	<b>100%</b>

<sup>1</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

<sup>2</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>3</sup> Ninety-nine percent of people diagnosed with HIV infection from 2011–2013 who were born in a US dependency were born in Puerto Rico, <1% were born in the US Virgin Islands.

<sup>4</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>5</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

<sup>6</sup> Total includes American Indian/Alaska Native, other and unspecified race/ethnicity.

<sup>7</sup> Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

**Table 5. People living with HIV/AIDS on December 31, 2014 by gender and race/ethnicity: Plymouth County, Massachusetts<sup>1</sup>**

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	279	53%	79	27%
Black (non-Hispanic)	164	31%	164	57%
Hispanic/Latino	71	14%	40	14%
Other/unknown	11	2%	6	2%
<b>Total</b>	<b>525</b>	<b>100%</b>	<b>289</b>	<b>100%</b>

<sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

**Table 6. People living with HIV/AIDS on December 31, 2014 by gender and exposure mode: Plymouth County, Massachusetts<sup>1</sup>**

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	233	44%	N/A	N/A
Injection drug use (IDU)	72	14%	45	16%
MSM/IDU	17	3%	N/A	N/A
Heterosexual sex	39	7%	96	33%
Other	17	3%	10	3%
Total Undetermined	147	28%	138	48%
• Presumed heterosexual sex <sup>2</sup>	N/A	N/A	117	40%
• Undetermined <sup>3</sup>	147	28%	21	7%
<b>Total</b>	<b>525</b>	<b>100%</b>	<b>289</b>	<b>100%</b>

<sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>3</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

**Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Plymouth County, Massachusetts<sup>1</sup>, 2004–2013<sup>2</sup>**

	Male		Female		Total
	N	%	N	%	
2004	20	59%	14	41%	34
2005	25	66%	13	34%	38
2006	20	57%	15	43%	35
2007	24	69%	11	31%	35
2008	22	63%	13	37%	35
2009	24	67%	12	33%	36
2010	16	59%	11	41%	27
2011	22	52%	20	48%	42
2012	26	62%	16	38%	42
2013	31	74%	11	26%	42

<sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

**Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Plymouth County, Massachusetts<sup>1</sup>, 2004–2013<sup>2</sup>**

	White Non-Hispanic		Black Non-Hispanic		Hispanic/Latino		Asian/Pacific Islander		Total <sup>3</sup>
	N	%	N	%	N	%	N	%	N
2004	18	53%	11	32%	5	15%	0	0%	34
2005	15	39%	16	42%	7	18%	0	0%	38
2006	12	34%	13	37%	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	35
2007	13	37%	15	43%	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	35
2008	11	31%	21	60%	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	35
2009	13	36%	17	47%	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	36
2010	8	30%	13	48%	6	22%	0	0%	27
2011	15	36%	22	52%	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	42
2012	10	24%	28	67%	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	42
2013	15	36%	21	50%	5	12%	0	0%	42

<sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

<sup>3</sup> Totals include American Indian/Alaskan Native individuals, and those of other or undetermined race/ethnicity.

<sup>4</sup> Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

**Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Plymouth County, Massachusetts<sup>1</sup>, 2004–2013<sup>2</sup>**

	US		Puerto Rico/ US Dependency <sup>3</sup>		Non-US		Total
	N	%	N	%	N	%	N
2004	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	11	32%	<b>34</b>
2005	21	55%	5	13%	12	32%	<b>38</b>
2006	21	60%	0	0%	14	40%	<b>35</b>
2007	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	20	57%	<b>35</b>
2008	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	17	49%	<b>35</b>
2009	19	53%	0	0%	17	47%	<b>36</b>
2010	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	11	41%	<b>27</b>
2011	22	52%	0	0%	20	48%	<b>42</b>
2012	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	26	62%	<b>42</b>
2013	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	17	40%	<b>42</b>

<sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

<sup>3</sup> Ninety-eight percent of people living with HIV/AIDS in MA who were born in a US dependency were born in Puerto Rico, 2% were born in US minor outlying areas, <1% were born in the US Virgin Islands, and <1% were born in Guam.

<sup>4</sup> Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

**Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Plymouth County, Massachusetts<sup>1</sup>, 2004–2013<sup>2</sup>**

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX <sup>3</sup>		Undeter- mined <sup>4</sup>		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2004	8	24%	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	6	18%	11	32%	34
2005	9	24%	5	13%	0	0%	6	16%	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	13	34%	38
2006	12	34%	-- <sup>5</sup>	-- <sup>5</sup>	0	0%	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	8	23%	6	17%	35
2007	11	31%	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	6	17%	0	0%	-- <sup>5</sup>	-- <sup>5</sup>	11	31%	35
2008	12	34%	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	8	23%	0	0%	-- <sup>5</sup>	-- <sup>5</sup>	8	23%	35
2009	10	28%	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	7	19%	0	0%	8	22%	9	25%	36
2010	7	26%	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	5	19%	0	0%	6	22%	8	30%	27
2011	13	31%	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	6	14%	0	0%	11	26%	11	26%	42
2012	11	26%	-- <sup>5</sup>	-- <sup>5</sup>	0	0%	-- <sup>5</sup>	-- <sup>5</sup>	0	0%	14	33%	13	31%	42
2013	12	29%	-- <sup>5</sup>	-- <sup>5</sup>	0	0%	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	8	19%	18	43%	42

<sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

<sup>3</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>4</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

<sup>5</sup> Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15



**Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Plymouth County, Massachusetts<sup>1</sup>, 2004–2013<sup>2</sup>**

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2004	16	34	47%
2005	12	38	32%
2006	18	35	51%
2007	10	35	29%
2008	9	35	26%
2009	9	36	25%
2010	11	27	41%
2011	19	42	45%
2012	17	42	40%
2013	15	42	36%

<sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.  
Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

**Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Plymouth County, Massachusetts,<sup>1</sup> 2011–2013<sup>2</sup>**

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
<b>Gender:</b>	<b>N</b>	<b>N</b>	<b>%</b>
Male	35	79	44%
Female	16	47	34%
<b>Race/Ethnicity:</b>	<b>N</b>	<b>N</b>	<b>%</b>
White (non-Hispanic)	18	40	45%
Black (non-Hispanic)	27	71	38%
Hispanic/Latino	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>
Asian/Pacific Islander	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>
Other/Undetermined <sup>3</sup>	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>
<b>Place of Birth:</b>	<b>N</b>	<b>N</b>	<b>%</b>
US	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>
Puerto Rico/US Dependencies <sup>4</sup>	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>
Non-US	27	63	43%
<b>Total</b>	<b>51</b>	<b>126</b>	<b>40%</b>

<sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

<sup>3</sup> Includes American Indian/Alaska Native, other and unspecified race/ethnicity.

<sup>4</sup> Ninety-nine percent of people diagnosed with HIV infection from 2011–2013 who were born in a US dependency were born in Puerto Rico, <1% were born in the US Virgin Islands.

<sup>5</sup> Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15